August 31, 2001

Study Group Members	Name

Directions: Be sure to include in-line citations, including page numbers if appropriate, every time you use the results of discussion, a text, notes, or technology. **Only write on one side of each page.** 

"Obvious" is the most dangerous word in mathematics." – Eric Temple Bell

## **Problems**

- 1. There are many ways to define (or compute) area. Illustrate your understanding of the notation and method used in Section 2 of Chapter 5 by using the appropriate limit to compute the area of the region between x = 1 and x = 5 that is bounded below by the x axis and above by the graph of the curve  $y = x^3 1$ .
- 2. The first few terms of a certain sequence are:  $3, -3, 5, 69, 255, 653, 1377, 2565, 4379, 7005, \cdots$ . Using  $a_1 = 3, a_2 = -3, a_3 = 5$ , etc., determine a formula for  $a_n$ .